

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A dual mode wireless transceiver comprising:
- a direct sequence spread spectrum transmitter portion with a first data transmission rate ;
  - a frequency hopping spread spectrum transmitter portion with a data transmission rate that is greater than said first data transmission rate ;
  - a mode selection circuit coupled to said direct sequence spread spectrum transmission portion and to said frequency hopping spread spectrum transmission portion and configured to
    - detect when the transceiver is transmitting a voice transmission and in response thereto to selectively activate said direct sequence spread spectrum portion when in a direct sequence spread spectrum transmission mode with a first data transmission rate and to deactivate said frequency hopping spread spectrum transmission portion and
    - detect when the transceiver is transmitting a data transmission and in response thereto to selectively activate said frequency hopping spread spectrum transmission portion and to deactivate said direct sequence spread spectrum transmitter portion when in a frequency hopping spread spectrum transmission mode with a data transmission rate that is greater than said first data transmission rate; and
  - a receiver portion capable of receiving and demodulating both direct sequence spread spectrum modulated signals and frequency hopping spread spectrum modulated signals.

2. (Original) The dual mode wireless transceiver of Claim 1, wherein said direct sequence spread spectrum transmitter portion comprises a spreading code generator selectively mixed with an input signal.

3. (Original) The dual mode wireless transceiver of Claim 2, further comprising a frequency generator and wherein said frequency hopping spread spectrum transmitter portion further includes a hopping sequence generator selectively coupled to said frequency generator.

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4. (Original) The dual mode wireless transceiver of Claim 2, further comprising a spreading code mixer for mixing the output of said spreading code generator and the input signal.

5. (Original) The dual mode wireless transceiver of Claim 4, further comprising a modulating mixer coupled to receive the output of said spreading code mixer and said frequency generator.

6. (Original) The dual mode wireless transceiver of Claim 1, wherein said receiver portion selectively receives a spreading code from said direct sequence spread spectrum transmitter portion.

7. (Original) The dual mode wireless transceiver of Claim 1, wherein said receiver portion selectively receives a demodulation frequency signal from said frequency hopping spread spectrum transmitter portion.

8. (Currently amended) A dual mode wireless transceiver configured to transmit a transmission, comprising:

a frequency generator;

a spreading code mixer;

a spreading code generator capable of generating a spreading code and selectively coupled to said spreading code mixer;

a frequency hopping sequence generator capable of generating a hopping sequence and selectively coupled to said frequency generator;

a modulating mixer coupled to receive the spreading code of said spreading code mixer and an output of said frequency generator;

a spread spectrum control signal system including circuitry configured to recognize whether the transmission is voice or data and

when the transmission is voice, a switch to disconnect said frequency hopping sequence from said frequency generator and to couple said spreading code to said spreading code mixer in a first transmission mode with a first transmission rate and to couple said hopping sequence to said frequency generator in a second transmission mode with a transmission rate greater than said first transmission rate

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when the transmission is data, to disconnect said spreading code from said spreading code mixer and to couple said frequency hopping sequence to said frequency generator in a second transmission mode with a transmission rate greater than said first transmission rate; and  
a demodulation portion coupled to receive the output of said frequency generator.

9. (Original) The dual mode wireless transceiver of claim 8, wherein said demodulation portion is coupled to selectively receive the spreading code of said spreading code generator.

10. (Cancelled)

11. (Original) The dual mode wireless transceiver of claim 8, wherein said a spreading code mixer is a digital mixer.

12. (Original) The dual mode wireless transceiver of claim 8, wherein said frequency generator is a phase locked loop.

13. (Original) The dual mode wireless transceiver of claim 8, wherein phase locked loop includes a voltage controlled oscillator, a lowpass filter and a frequency mixer/phase detector.

14. (Currently amended) A cordless telephone dual mode wireless transceiver comprising:

a direct sequence spread spectrum transmitter means for modulating an input signal as a direct sequence spread spectrum signal;

a frequency hopping spread spectrum transmitter means for modulating the input signal as a frequency hopping spread spectrum signal;

a mode selection ~~means~~ switch coupled to said direct sequence spread spectrum transmitter means and to said frequency hopping spread spectrum transmitter means for detecting whether the input signal is voice or data and

when the input is voice, selecting either said direct sequence spread spectrum transmitter means to transmit said input signal as a direct sequence spread spectrum signal with a first transmission rate, and ~~or~~

when the input is data, selecting said frequency hopping spread spectrum transmitter means to transmit said input signal as a frequency hopping spread

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spectrum signal with a transmission rate greater than said first transmission rate;  
and

a receiver capable of receiving and demodulating both direct sequence spread spectrum modulated signals and frequency hopping spread spectrum modulated signals.

15. (Original) The cordless telephone dual mode wireless of Claim 14, wherein said direct sequence spread spectrum transmitter means includes a spreading code generator.

16. (Original) The cordless telephone dual mode wireless of Claim 15, further including a frequency generator and wherein said frequency hopping spread spectrum transmitter means further includes a hopping sequence generator selectively coupled to said frequency generator.

17. (Original) The dual mode wireless transceiver of Claim 15, further including a spreading code mixer for mixing the output of said spreading code generator and the input signal.

18. (Original) The cordless telephone dual mode wireless of Claim 17, further including a modulating mixer coupled to receive the output of said spreading code mixer and said frequency generator.

19. (Original) The dual mode wireless transceiver of Claim 14, wherein said receiver portion selectively receives a spreading code from said direct sequence spread spectrum transmitter means.